

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

ATTORNEY DOCKET NO. CONFIRMATION NO. FIRST NAMED INVENTOR FILING DATE APPLICATION NO. 4082 51751 10/660,919 09/13/2003 Timothy G. Adams EXAMINER 09/14/2004 21874 PENG, KUO LIANG **EDWARDS & ANGELL, LLP** P.O. BOX 55874 ART UNIT PAPER NUMBER BOSTON, MA 02205 1712

DATE MAILED: 09/14/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

			Į,u
Office Action Summary	Application No.	Applicant(s)	ı
	10/660,919	ADAMS ET AL.	
	Examiner	Art Unit	
	Kuo-Liang Peng	1712	
The MAILING DATE of this communication ap	pears on the cover sheet with the o	correspondence address -	-
Period for Reply A SHORTENED STATUTORY PERIOD FOR REPL	VIS SET TO EXPIRE 3 MONTH	(S) FROM	
THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1. after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a replevent of the period for reply is specified above, the maximum statutory period. - Failure to reply within the set or extended period for reply will, by statut Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	136(a). In no event, however, may a reply be tingly within the statutory minimum of thirty (30) day will apply and will expire SIX (6) MONTHS from e. cause the application to become ABANDONE	nely filed s will be considered timely. the mailing date of this communica D (35 U.S.C. § 133).	tion.
Status			
1) Responsive to communication(s) filed on 9/13	3/03 filing.		
,	s action is non-final.		
3) Since this application is in condition for allows	ance except for formal matters, pro	osecution as to the merits	s is
closed in accordance with the practice under	<i>Ex parte Quayle</i> , 1935 C.D. 11, 4	53 O.G. 213.	
Disposition of Claims			
4)⊠ Claim(s) <u>1-15</u> is/are pending in the application	۱.		
4a) Of the above claim(s) <u>9-15</u> is/are withdraw			
5) Claim(s) is/are allowed.			
6)⊠ Claim(s) <u>1-8</u> is/are rejected.			
7)⊠ Claim(s) <u>1-8</u> is/are objected to.		*	
8) Claim(s) are subject to restriction and/	or election requirement.	:	
Application Papers			
9)☐ The specification is objected to by the Examin	er.		
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.			
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).			
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).			
11)☐ The oath or declaration is objected to by the E	xaminer. Note the attached Office	e Action or form, PTO-152	2.
Priority under 35 U.S.C. § 119	. ,		
12) Acknowledgment is made of a claim for foreig	n priority under 35 U.S.C. § 119(a	a)-(d) or (f).	
a) All b) Some * c) None of:			
1. Certified copies of the priority documents have been received.			
2. Certified copies of the priority documents have been received in Application No			
3. Copies of the certified copies of the pri		red in this National Stage	
application from the International Bures	•	a d	
* See the attached detailed Office action for a lis	or the certified copies not receive	ea.	
August (August)			
Attachment(s) 1) Notice of References Cited (PTO-892)	4) 🔲 Interview Summar	v (PTO-413)	~
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail-	Date	
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/06 Paper No(s)/Mail Date	5) Notice of Informal 6) Other:	Patent Application (PTO-152)	
i apei ino(s)/iniaii bato			

U.S. Patent and Trademark Office PTOL-326 (Rev. 1-04)

Art Unit: 1712

DETAILED ACTION

Election/Restrictions

- Restriction to one of the following inventions is required under 35 U.S.C.
 121:
 - I. Claims 1-8, drawn to a composition, classified in class 528, subclass 10+.
 - II. Claims 9-13, drawn to a method of coating, classified in class 427, subclass 387.
- III. Claims 14-15, drawn to a method of preparing a composition, classified in class 528, subclass 480+.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions of Group I and II are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the

Art Unit: 1712

instant case, the composition can be used in a materially different process, such as being extruded into a freestanding sheet.

- 3. Inventions of Group III and I are related as process of making and product made. The inventions are distinct if either or both of the following can be shown:

 (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case, the process can be used to make any product derived from hydrolysable silanes, however, without silanes of formula (II).
- 4. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.
- 5. During a telephone conversation with S. Matthew Cairns on August 31, 2004 a provisional election was made WITH traverse to prosecute the invention of Group I, claims 1-8. Affirmation of this election must be made by applicant in replying to this Office action. Claims 9-15 are withdrawn from further

Art Unit: 1712

consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

6. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Claim Objections

7. Claims 1-8 are objected to because of the following informalities:

In Claims 1 (lines 9-10) and 5 (lines 9-10), should "aryl or substituted aryl" be -- arylene or substituted arylene --?

In Claims 3 and 7, should " $M^n(OR^{11})_n$ " be -- $M(OR^{11})_n$ --?

In Claims 3 (line 2) and 7 (line 2), should "silanes" be -- compounds -- because M is not necessarily a Si?

Appropriate correction is required.

Application/Control Number: 10/660,919 Page 5

Art Unit: 1712

Claim Rejections - 35 USC § 112

8. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

9. Claims 1-8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In Claims 1 (line 8) and 5 (line 8), " (C_1-C_{10}) alkyl" causes confusion because R^3 is a divalent radical.

Claim Rejections - 35 USC § 102

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 11. Claims 1-8 are rejected under 35 U.S.C. 102(b) as being anticipated by Sugiura (JP 2001-172565).

Art Unit: 1712

Sugiura discloses a composition comprising an organic polysilica partial condensate of (A-1) silanes of formula (1) and (A-2) silanes of formula (2). ([0008]-[0014] and Examples) The weight average molecular weight of the organic polysilica partial condensate is described in [0018]. Silanes of formula (3) can be added. ([0012]). The English translation has been requested by Examiner. It should be available to Applicants later upon request.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kuo-Liang Peng whose telephone number is (571) 272-1091. The examiner can normally be reached on Monday-Friday from 8:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski, can be reached on (571) 272-1302. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR

Art Unit: 1712

only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

klp September 10, 2003

> Kuo-Liang Peng Primary Examiner Art Unit 1712

KUO-LIANG PENG PRIMARY EXAMINER